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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/008,863	11/07/2001	Bar-Chung Hwang	B-4380 619295-2	5050

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EXAMINER

DANG, DU Y M

ART UNIT	PAPER NUMBER
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2621

DATE MAILED: 06/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/008,863

Applicant(s)

HWANG ET AL.

Examiner

Duy M. Dang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-6,11,12,29 and 30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-6,11,12,29 and 30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11/07/01 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. Applicant's election of Species I (claims 1, 3-6, 11-12, and newly added claims 29-30) in the reply filed on 1/12/05 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

2. Applicants amendment filed on 1/12/05 to cancel claims 2, 7-10 and 13-28, and add new claims 29-30 has been entered and made of record. Pending claims are 1, 3-6, 11-12, and 29-30.

Abstract

3. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

In this case, the current abstract contains more than 150 words.

Drawings

4. Figures 1-2 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.121(d)) so as not to obstruct any portion of the drawing figures. If the changes are not

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accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

5. The drawings are objected to under 37 CFR 1.83(a) because they fail to show features as described in the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled “Replacement Sheet” in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

On page 10 lines 19-24 of the instant specification, it states

“Figs. 7 and 8 respectively illustrate the apparatus embodying the method of this invention. In the Drawings, the solid line represents the signal transmission of displaying a

low resolution image, and the dotted line represents the signal transmission of displaying a high-resolution image.”

It is noted that there is no dotted line in both figures 7 and 8 which only show dash-lines. If the “dotted line” mentioned in the instant specification refers to the “dashed line” shown in figures 7-8, please spell it out.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

7. Claim 1, 3-6, 11-12, and 29-30 are rejected under 35 U.S.C. 102(a) as being anticipated by Applicant’s admitted prior art [see figures 1-2 and their text portion described in the instant specification. Referred as the AAPA hereinafter].

Regarding claim 1, the AAPA teaches:

receiving plural lines of image data, and storing the lines of image data in plural line buffers [see the use of “two line buffers to store image data” mentioned in page 1 lines 4-6, page 4 line 20 to page 5 line 12 of the instant specification in together with figure 1];

retrieving pixel data at the same row from the plural line buffers [see retrieving pixel data R11 and R12 mentioned in page 4 lines 27-28 of the instant specification. Note the pixel data R11 and R12 as shown in figure 1 represents the so called “pixel data at the same row”];

using the pixel data to produce a low-resolution image data [i.e., the pixel data R11 shown in figure 1 and mentioned in page 4 lines 28-30 of the instant specification] and

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transmitting the low-resolution image data to a receiving end [see page 5 lines 8-11 of the instant specification];

using the pixel data to produce plural data different values [see page 5 lines 1-12 of the instant specification, for example, the “R12-R11” refers to the different value]; and

compressing the data difference values and transmitting the compressed-data difference values [see page 5 lines 8-11 of the instant specification].

Regarding claim 3, the AAPA further teaches wherein the low-resolution image data includes a pixel datum of the retrieved pixel data [i.e., the pixel value of the red pixel data R11 of figure 1 refer to the so called “pixel datum”].

Regarding claim 4, the AAPA further teaches wherein the low-resolution image data includes the average of the retrieved pixel data [see page 5 lines 1-7 of instant specification].

Regarding claim 5, the AAPA further teaches wherein the number of the scanned lines is 2 [see scanning line 1 and scanning line 2 shown in figure 2].

Regarding claim 6, while the AAPA fails to teach “determining whether all of the frames of image data are retrieved, providing a frame-ending signal to the receiving end if yes”, the AAPA does teach retrieving the pixel data in sequence i.e., retrieving R13, R14, R23, and R24 after retrieving R11, R12, R21, and R22 [see page 5 lines 8-11 of the instant specification] Thus, such determining and providing a frame ending signal are inherently included in the AAPA.

Regarding claim 11, the AAPA further teaches wherein the data difference values are taken from the derived difference of the pixel datum served as the low-resolution image data and the pixel data except for the pixel datum [see “R11-Ravg_11” mentioned in page 5 lines 4-7 of

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the instant specification. Note the Ravg_11, for example, refers to the so called “derive difference of the pixel datum served as the low resolution image data”].

Regarding claim 12, the AAPA further teaches wherein the data difference values are taken from the difference of the pixel data and the average value of the pixel data [see “R11-Ravg_11” mentioned in page 5 lines 4-7 of the instant specification].

Regarding claims 29-30, the AAPA further teaches a scanner [see figure 1 and page 3 lines 6-7 of the instant specification]; and wherein the lines of image data are scanning lines of image data [see figure 2 and page 1 lines 20-22 of the instant specification].

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Hwang [US Patent No. 6,184,936], Murayama et al. [US Patent No. 4,797,943], Gabriel et al [US Patent No. 4,631,750] are example of image processing.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Duy M. Dang whose telephone number is 571-272-7389. The examiner can normally be reached on Monday to Friday from 5:30AM to 2:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bhavesh Mehta can be reached on 571-272-7453. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

dmd
5/05

A handwritten signature in black ink, appearing to read 'Duy M. Dang', with a stylized, flowing script.

Duy M. Dang
Patent Examiner